

### ABSTRACT OF THE DISCLOSURE

Olfactory neuron cultures and methods of making and using the same are disclosed. The olfactory neuron cultures may be used to study oxidative stress-related disorders and diseases such as Alzheimer's disease. The olfactory neuron  
5 cultures may be used to screen candidate compounds for those which reduce, inhibit or prevent oxidative stress or damage. The compounds which reduce, inhibit or prevent oxidative stress or damage may be used to treat Alzheimer's disease and other oxidative stress-related disorders and diseases.